

# Library Management System

Database name: library

Tables:

Admin:

	username	password	role	token	email	created_at	updated_at
1	admin	\$2y\$12\$tsR7LthjG 0dlBO4g.oOeGq5xm3N84dncjx8GNio A...	admin	IWEsXX5AYhC3TWWhB4LoaLeyrwGiwskh	prinsajoshi5@gmail.com	NULL	2024-10-30 03:32:02
3	prinsa	\$2y\$12\$prBOY.r57h8lcHuMZdVQQ.WyXLFAO/gK2ZTWZd7y2Jp...	User	r1SCATMMQUIVaytg3rrMKUjBDvwBeMD0	prinsajosh5@gmail.com	2024-10-30 03:36:08	2024-10-30 07:00:17
4	prinsa1	\$2y\$12\$8Rdoz4AxXxGvHtGbgvIG/uKteOQOGhxGGf7G22S/pBQ...	User	nTisWMXIPA9PQMqDjUAwdvu0mkwMP61T	prinsajosh1@gmail.com	2024-10-30 03:38:10	2024-10-30 03:38:10
6	ram	\$2y\$12\$GhLHlzN82hy6LMChs2c/O1Z41RidcQ.uesVQJcf5wB...	librarian	B6Oxi6jqWXIAw2Tafxm82NtzONqBh5nz	ram@gmail.com	2024-10-30 06:57:13	2024-10-30 07:15:29
7	prinsa2	\$2y\$12\$FPcD6/EUSKJ4J9swaoKICuFLJ2fXMGOPBHvjyTq3HU...	User	JqJeJyAZ72cPB3R5bGiGIFrASWVyTRrO	prinsajosh2@gmail.com	2024-10-30 07:15:40	2024-10-30 07:15:40

Books:

d	title	author	isbn	description	created_at	updated_at
1	The Great Gatsby	F. Scott Fitzgerald	9780743273565	A novel about the American dream.	2024-10-30 04:45:49	2024-10-30 04:45:49
2	To Kill a Mockingbird	Harper Lee	9780060935467	A story about racial injustice in the Deep South.	2024-10-30 04:45:49	2024-10-30 04:45:49
3	1984	George Orwell	9780451524935	A dystopian novel set in a totalitarian society.	2024-10-30 04:45:49	2024-10-30 04:45:49
4	Pride and Prejudice	Jane Austen	9780486284736	A romantic novel that critiques the British landed...	2024-10-30 04:45:49	2024-10-30 04:45:49
5	Moby Dick	Herman Melville	9781503280786	The narrative of a ship captain's obsession with a...	2024-10-30 04:45:49	2024-10-30 04:45:49

Books\_User:

(To show which user took which books and maintain relationship)

	id	user_id	book_id	taken_date	submission_date	reminder_date	created_at
te	2	1	1	2024-10-30	2024-11-06	2024-11-05	2024-10-30 05:...
te	3	1	2	2024-10-30	2024-11-06	2024-11-05	2024-10-30 05:...
te	5	3	3	2024-10-30	2024-11-06	2024-11-05	2024-10-30 11:...

Roles:

Admin

(Here all the admin,librarian,users details are stored)

Attributes used:

```
`id` bigint(20) UNSIGNED NOT NULL,  
`username` varchar(255) NOT NULL,  
`password` varchar(255) NOT NULL,  
`role` varchar(255) NOT NULL,  
`token` varchar(255) DEFAULT NULL,  
`email` varchar(255) NOT NULL,
```

Roles:

(To perform below roles admin's token should be used in the header file)

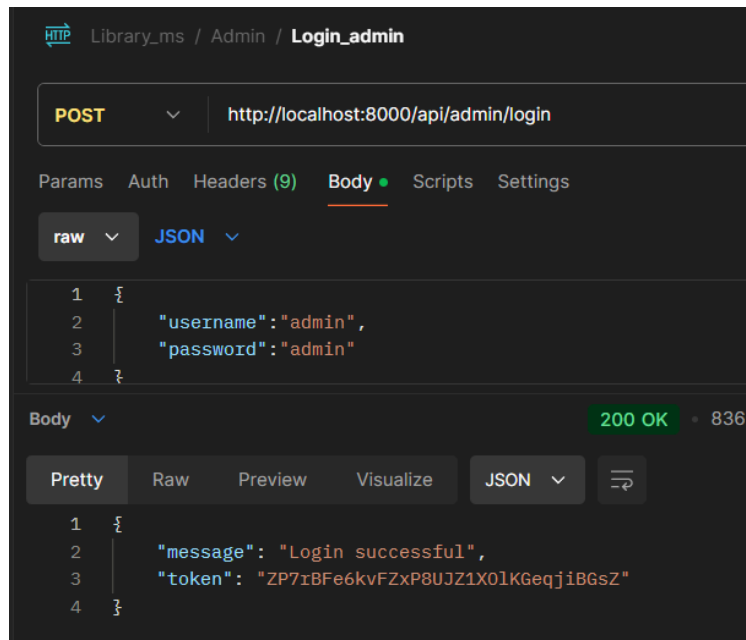
-Role with 'admin' can create User and Librarian

-View books borrowed and returned

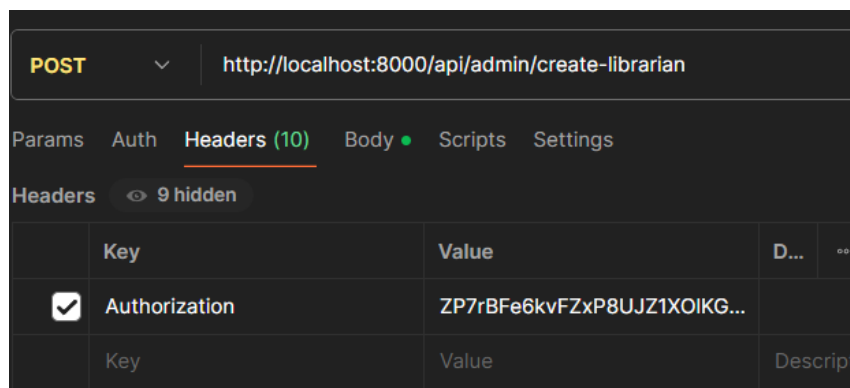
-'admin' can also delete Librarian

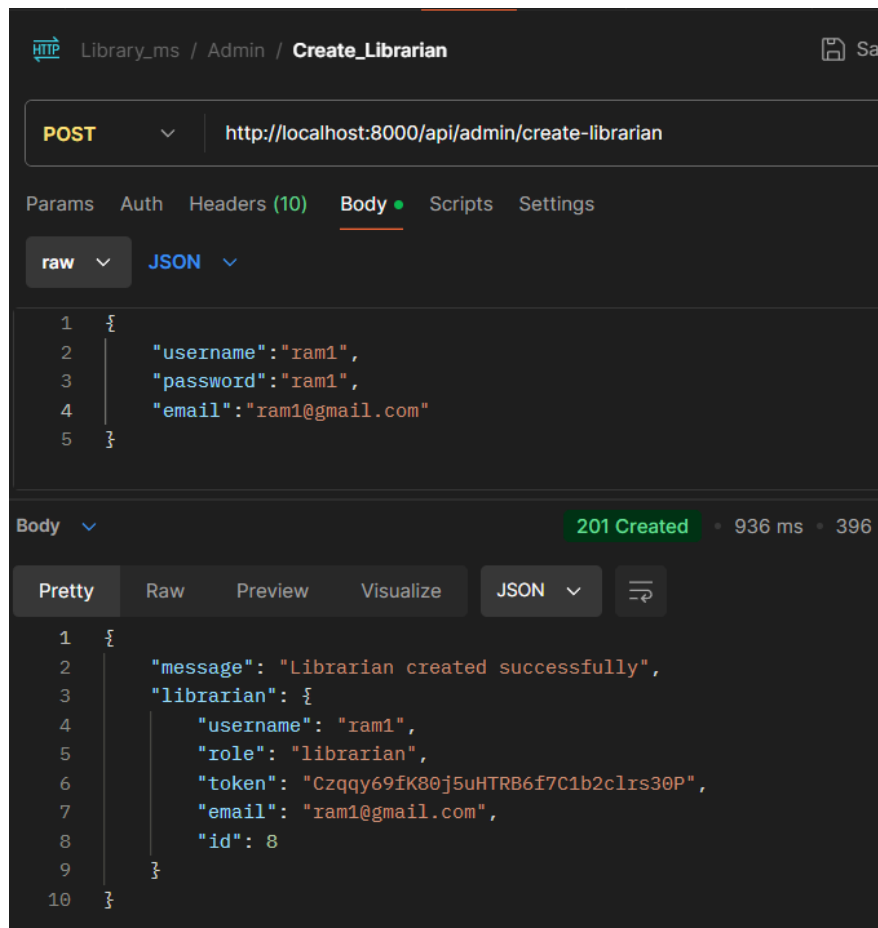
(Admin's username is admin while password is hashed admin)

When Admin Login:

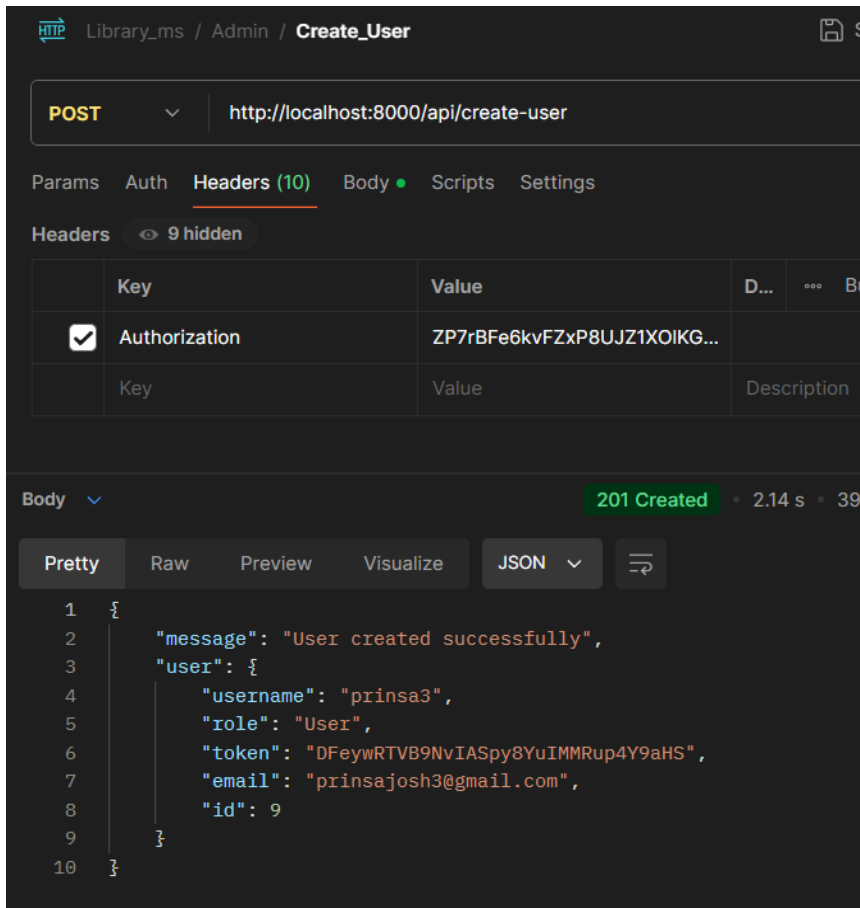


When Admin create Librarian:

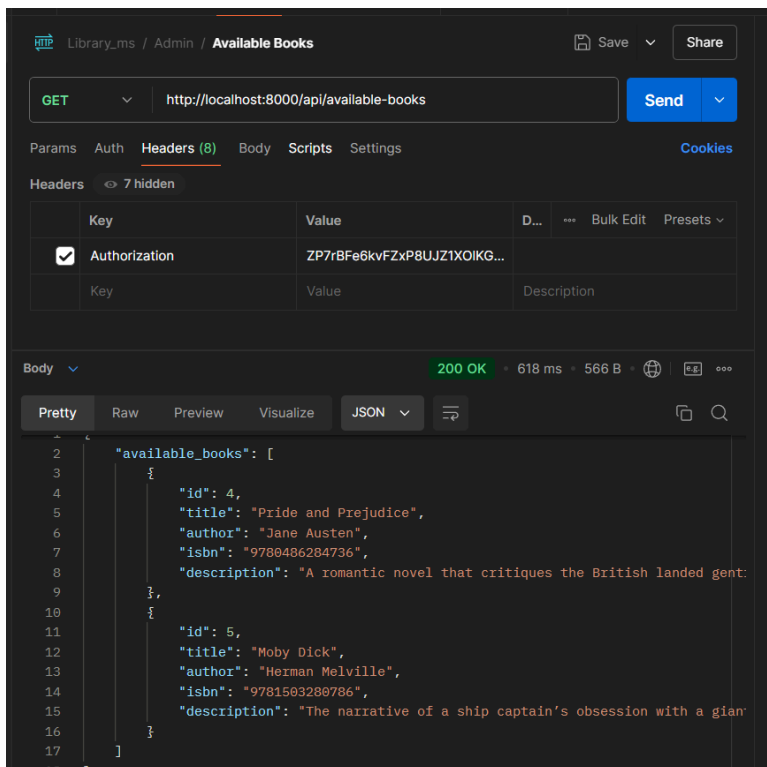




When Admin create\_user(token added in header):



Admin accessing not borrowed books:



Admin accessing taken books along with which user took which book:

HTTP Library\_ms / Admin / Taken books Save

GET ▼ http://localhost:8000/api/taken-books

Params Auth **Headers (8)** Body Scripts Settings

Headers 7 hidden

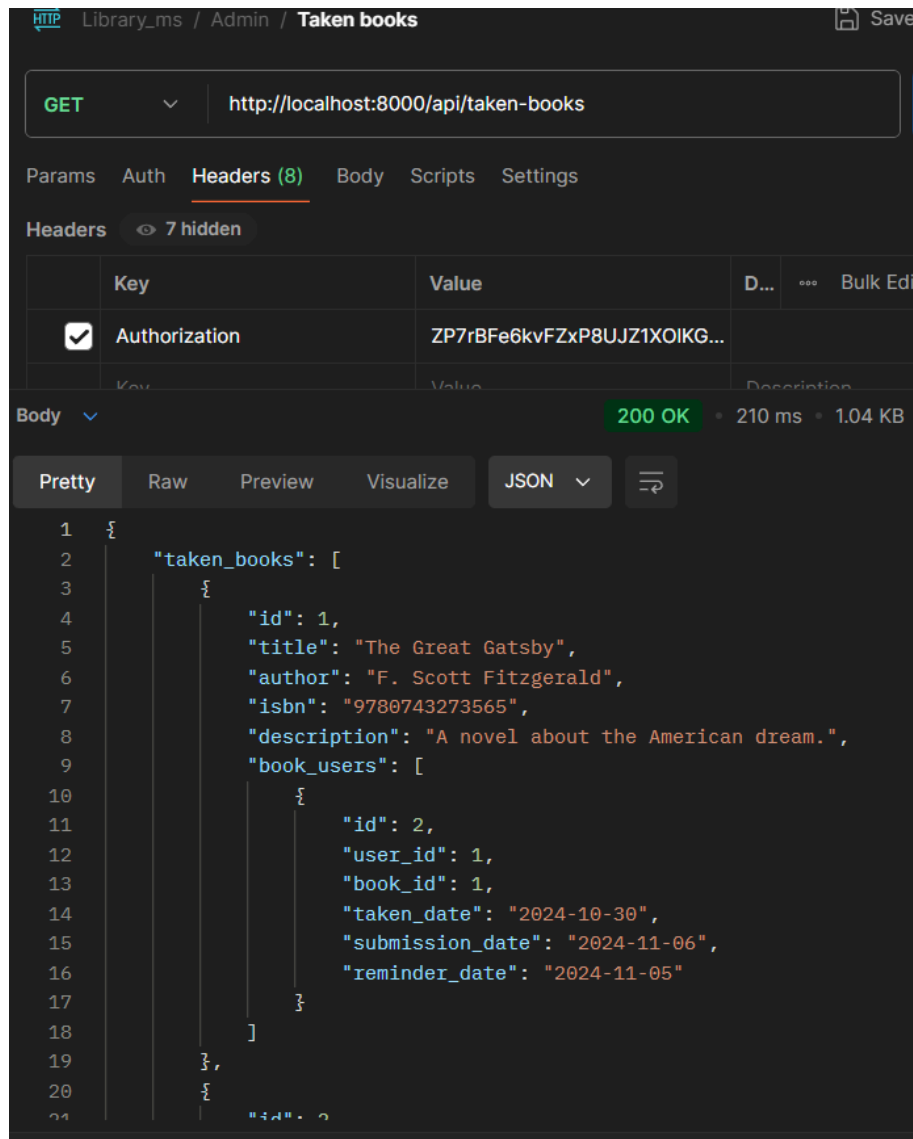
	Key	Value	D...	...	Bulk Ed
<input checked="" type="checkbox"/>	Authorization	ZP7rBF6kvFZxP8UJZ1XOIKG...			
	Key	Value	Description		

Body ▼ **200 OK** • 210 ms • 1.04 KB

Pretty Raw Preview Visualize **JSON** ▼ ≡

```
1  {}
2    "taken_books": [
3      {
4        "id": 1,
5        "title": "The Great Gatsby",
6        "author": "F. Scott Fitzgerald",
7        "isbn": "9780743273565",
8        "description": "A novel about the American dream.",
9        "book_users": [
10          {
11            "id": 2,
12            "user_id": 1,
13            "book_id": 1,
14            "taken_date": "2024-10-30",
15            "submission_date": "2024-11-06",
16            "reminder_date": "2024-11-05"
17          }
18        ]
19      },
20      {
21        "id": 2,
```

Admin can delete librarian:



## Librarian

(He/she can perform CRUD operation with book table and add/update/delete books from library)

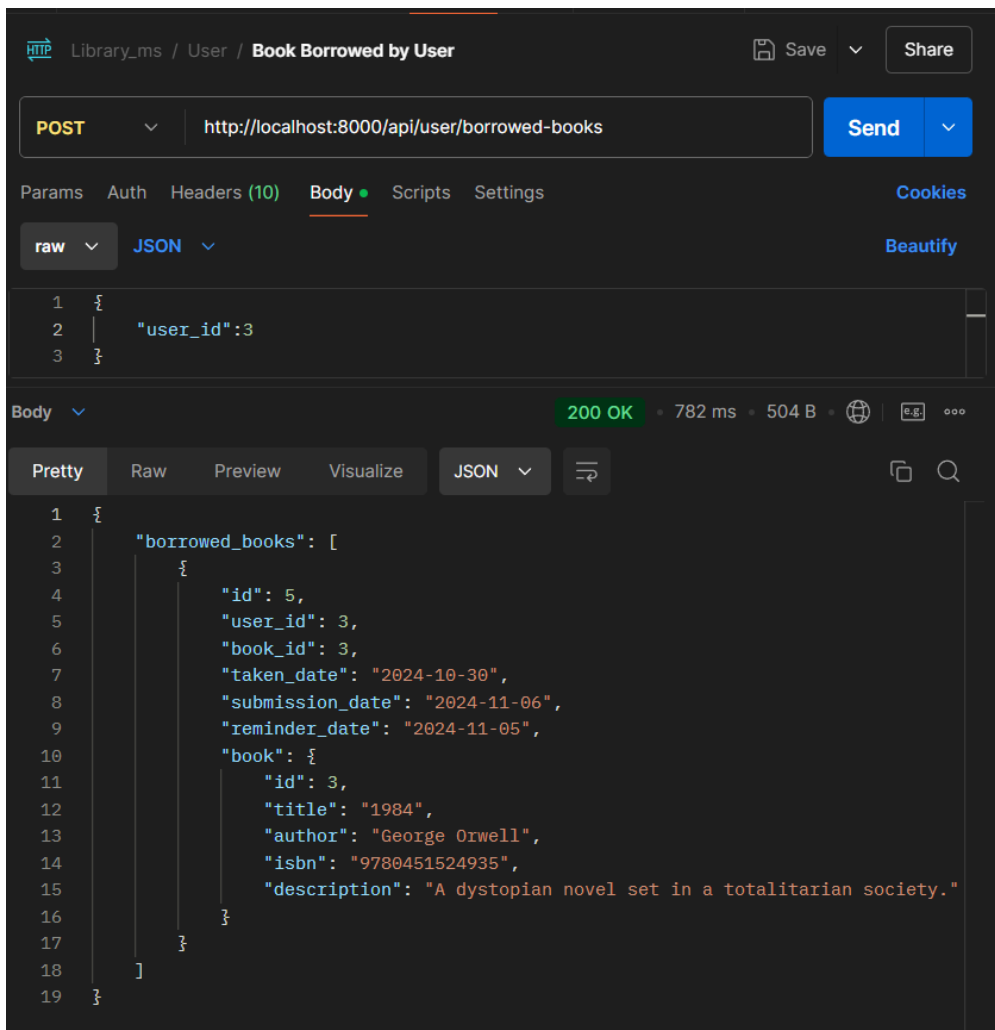
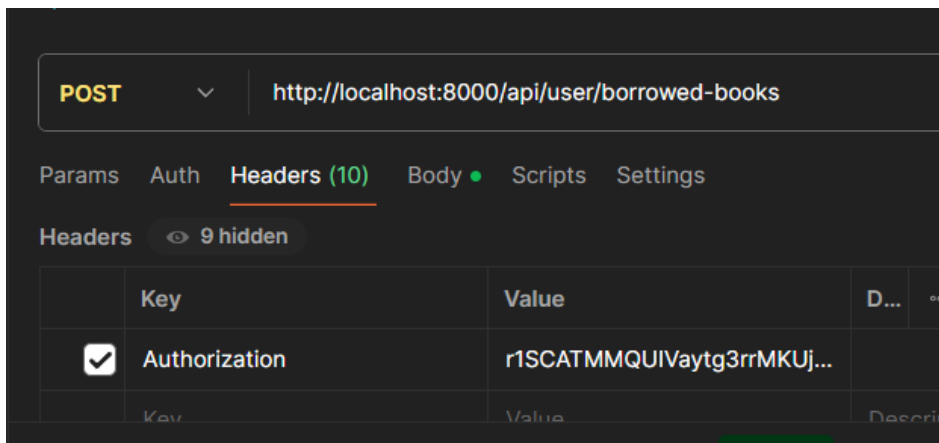
(same as Admin Librarian can see taken books, available books, also login as librarian and get new token, also create user)

-perform above all operation librarian needs its token otherwise it is unauthorized

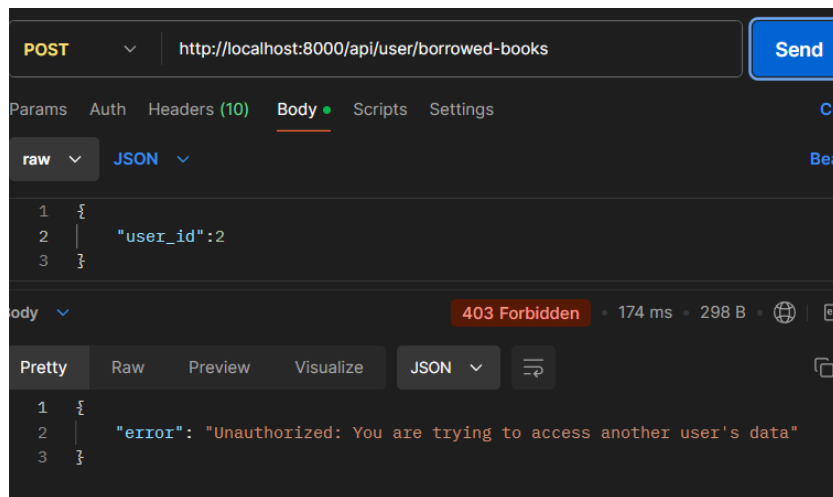
## User

(User can login and update its token as well)

(He/she can see taken books and available books and also see details about the books he/she brought along with its submission time))



But if User1 tries to access User2 data he/she can't view it:



(For email purpose I have used scheduler which is running background scheduling process and it runs daily and check with remainder\_date and send the email in that date)